

REMARKS

1. In response to the Final Office Action mailed April 28, 2009, Applicants respectfully request reconsideration. Claims 20, 22-25, 27, 29-34, and 36-38 were last presented in the application. In the outstanding Office Action, claims 20, 22-25, 27, 29-34, 36-38 were rejected. By the foregoing Amendments, no claims have been amended. Claims 20, 22-25, 27, 29-34, and 36-38 have been cancelled, and new claims 39-56 have been added. Upon entry of this paper, claims 39-56 will be pending in this application. Of these eighteen (18) claims, 3 claims (claims 39, 45 and 51) are independent.

2. Based on the above Amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered and withdrawn.

Claim Rejections Under 35 USC § 103

3. The Examiner rejected claims 20, 22-25, 27, 29-34, and 36-38 under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 5,999,856 to Kennedy (hereafter “Kennedy”) in view of U.S. Patent No. 5,758,651 to Nygard et al. (hereafter “Nygard”). Applicants have cancelled claims 20, 22-25, 27, 29-34, and 36-38 thereby rendering these rejections moot.

New Claims

4. Applicants have added new claims 39-56. For at least the reasons set forth below, Applicants submit that Kennedy and Nygard taken individually or in the proposed combination, fail to teach all of the features of Applicants’ claim 39. Applicants also submit that the Examiner has not adequately cured every deficiency of the cited references.

5. Applicants’ claim 39 recites, in part, “wherein the amplifier is configured to amplify differences between the response signal and the first sampled value of the response signal at a plurality of times.” (See, Applicants’ claim 39, above.) Without addressing the propriety of the Examiner’s combination of Kennedy and Nygard, Applicants respectfully submit that neither Kennedy nor Nygard discloses this feature.

6. Kennedy is directed to a hearing assistance system that has diagnostic and calibration capabilities. (See, Kennedy, col. 3, lns. 52-53.) Kennedy discloses receiving electrical brain

waves via a response sensor, and discloses that the response sensor includes an electroencephalography (EEG) device. (See, Kennedy, col. 7, lns. 21-23.) Kennedy further discloses that the EEG device can “include[] a differential amplifier for amplification of the received brain waves.” (See, Kennedy, col. 7, lns. 38-39.) However, Applicants submit that Kennedy fails to disclose that the differential amplifier “is configured to amplify differences between the response signal and the first sampled value of the response signal at a plurality of times,” as recited in Applicants’ claim 39.

7. Nygard is directed to “a telemetry system and apparatus for recovering data from an auditory prosthesis.” (See, Nygard, col. 1, lns. 5-6.) Specifically, Nygard discloses a system that measures a neural response to stimulation applied by an auditory prosthesis. (See, Nygard, col. 1, lns. 24-30.) This system detects a potential across a pair of electrodes that is indicative of at least one parameter of the neural response. (See, Nygard, col. 1, lns. 24-30.) Further, Nygard discloses amplifying the sense pair potential difference using a suitable amplifier 20, and discloses that the amplified signal is then sampled and transmitted via an RF link. (See, Nygard, col. 2, ln. 66 through col. 3, ln. 4.)

8. Amplifier 20 of Nygard amplifies a *potential difference* between signals from two electrodes of a sense pair, not “differences between the response signal and the first sampled value of the response signal at a plurality of times,” as recited in Applicants’ claim 39. (See, Nygard, col. 2, ln. 49 through col. 3, ln. 1.)

9. Additionally, the sampling performed by Nygard is the sampling of an amplified signal at the output of amplifier 20. (See, Nygard, col. 3, lns. 1-4.) Nygard discloses transmitting the samples via an RF link, not an “amplifier [] configured to amplify differences between the *response signal* and *the first sampled value of the response signal* at a plurality of times,” as recited in Applicants’ claim 39 (emphasis added). (See, Nygard, col. 3, lns. 1-4.)

10. For at least the reasons set forth above, Applicants submit that Kennedy and Nygard taken individually or in the proposed combination, fail to teach all of the features of Applicants’ claim 39. Applicants also submit that the Examiner has not adequately cured every deficiency of the cited references.

11. In addition, Applicants' claim 45 recites, in part, "amplifying differences between the response signal and the first sampled value of the response signal at a plurality of times." (*See*, Applicants' claim 45, above.) Thus, Applicants submit that the combination of Kennedy and Nygard proposed by the Examiner also fails to teach all of the features of Applicants' claim 45 at least for reasons similar to those set forth above with regard to Applicants' claim 39. Applicants also submit that the Examiner has not adequately cured every deficiency of the cited references.

12. Additionally, Applicants' amended claim 51 recites, in part, "means for amplifying differences between the response signal and the first sampled value of the response signal at a plurality of times." (*See*, Applicants' amended claim 51, above.) Thus, Applicants submit that the combination of Kennedy and Nygard proposed by the Examiner also fails to teach all of the features of Applicants' amended claim 51 at least for reasons similar to those set forth above with regard to Applicants' claim 39. Applicants also submit that the Examiner has not adequately cured every deficiency of the cited references.

13. Regarding the Examiner's proposed combination of Kennedy and Nygard, Applicants note that the Examiner states the following in the Office Action:

The examiner implements the teaching of Nygard as a system that takes values of measured response and converts the analog response to a digital response by comparing the measured value to that of a threshold (it is understood that a threshold is calculated based on calculating a difference between the first measured value and the next in order to commands to the telemetry controller of Nygard.)in order to relay an EAP measurement.

(*See*, Office Action, page 4, lines 11-16.) The Examiner, however, identifies no support in Nygard for this allegation. Specifically, the Examiner has identified nothing in Nygard that discloses calculating a threshold by computing a difference between a first measured value and a next value. Nor has the Examiner identified any portion of Nygard allegedly disclosing the comparison of a measured value to a threshold. As such, Applicants are uncertain whether the Examiner is relying on his own personal knowledge. If so, Applicants respectfully request that the Examiner provide an affidavit supporting his reliance on personal knowledge in accordance with 37 C.F.R. 1.104(d)(2), which states, in part, that "[w]hen a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as

specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee.” (See, 37 C.F.R. 1.104(d)(2).)

14. Moreover, even if the Examiner could find support teaching implementing analog to digital conversion of a response by comparing a calculated threshold to the response, this teaching would still fail to teach an amplifier “wherein said amplifier is configured to amplify differences between the response signal and the first sampled value of the response signal at a plurality of times,” as recited in Applicants’ claim 39, above.

Dependent Claims

15. The dependent claims incorporate all the subject matter of their respective independent claims and add additional subject matter which makes them independently patentable over the art of record. Accordingly, Applicants respectfully assert that the dependent claims are also allowable over the art of record.

Conclusion

16. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

17. Applicants reserve the right to pursue any cancelled claims or other subject matter disclosed in this application in a continuation or divisional application, cancellations and amendments of above claims, therefore, are not to be construed as an admission regarding the patentability of any claims, and Applicants reserve the right to pursue such claims in a continuation or divisional application.

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Respectfully submitted,

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